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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Mihai Costea

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EXAMINER

HOANG, DANIEL L

ART UNIT

PAPER NUMBER

2436

NOTIFICATION DATE

DELIVERY MODE

09/18/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

lhptoms@leehayes.com

Office Action Summary	Application No. 10/769,106	Applicant(s) COSTEA ET AL.	
	Examiner DANIEL L. HOANG	Art Unit 2436	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 4/20/09.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,6-8,13-21 and 23-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,6-8,13-21 and 23-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>3/5/09, 6/24/09</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

RESPONSE TO ARGUMENTS

Applicant's arguments with respect to claims 1, 7, 13-16, 20-21, 26, and 28-30 have been considered but are moot in view of the new ground(s) of rejection.

The 112 rejections of the previous action have been appropriately withdrawn due to applicant's arguments and amendments.

CLAIM REJECTIONS

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 7, 13-16, 20-21, 26, and 28-30 rejected under 35 U.S.C. 103(a) as being unpatentable over Chen, US Patent No. 5960170, and further in view of Shipp, US Patent No. 7496963.

As per claim 1, 14, 21, Chen teaches:

A processor-readable medium comprising processor-executable instructions for:
parsing an input file to recognize a file format of the input file to recognize a file format of the input file,
wherein the parsing repeatedly parses once with each of a plurality of component parsers contained within a compound parser, wherein each of the plurality of component parsers is configured for recognition of a specific file format by which an input file is configured, wherein the compound parser is extensible, and wherein extending the compound parser comprises adding an additional component

parser configured to recognize an additional file format and executable code if present in a file of the additional file format;

[see col. 11, lines 21-50, wherein each virus detection object is viewed as being analogous to the claimed component parsers and the collection of detection objects is viewed as the claimed compound parser and further the virus detection objects are iteratively produced which is being viewed as analogous to the parser being extensible.]

checking contents of the input file, according to the recognized file format if available, to determine whether executable code exists within the input file, wherein the checking comprises detecting executable code because its location within the input file is inconsistent with the recognized file format;

[see col. 11, lines 37-46]

continuing to parse the input file until a component parser recognizes the file format of the input file or until all available component parsers within the compound parser have parsed the input file; and

[see col. 13, lines 38-55]

sending a status in response to results of said checking, wherein sending a status comprises further instructions for:

sending a file-has-no-code status when the file format of the input file was recognized and no executable code was found; and sending a file-has-code status when executable code was found.

[see col. 8, lines 17-24, wherein notification is sent to the virus detection server as to whether a virus has been detected]

wherein adding an additional component parser comprises instructions for:

identifying a new file format, wherein ability to recognize the new file format is functionality to be extended to the new compound parser;

configuring a new component parser according to the new file format, wherein the new component parser is configured to recognize files of the new format by locating executable code in files of the new format by locating executable code that is inconsistent with the new file format; and

extending functionality of the compound parser by adding the new component parser to the compound parser.

[see col. 11, lines 21-50

]

The Chen reference has been discussed above. While the Chen reference teaches virus detection objects which examiner views as analogous to the claimed component parsers, for the sake of expediting prosecution, it will be assumed that Chen's virus detection objects do not contain all the functionalities of the claimed component parsers. Such functionalities include the parsing of the input file to recognize a specific file type. While Chen teaches that virus detection objects are tailored for different file types, Chen is not explicit in teaching that the virus detection objects are able to recognize a specific file format. For this limitation, examiner relies upon the Shipp reference.

Shipp teaches a file-type-analyser which searches the file code in order to determine the file format (see col. 4, lines 11-35). It would have been obvious to one of ordinary skill in the art to modify the Chen reference to include the file-type-analyser taught by Shipp in order to improve on the efficiency of the Chen invention. The Chen invention is already capable of scanning for viruses based on file types and being able to scan a file in order to determine the file type would allow the appropriate virus detection object to be used to scan for viruses in the appropriate file type.

As per claim 13, Chen teaches:

The processor-readable medium as recited in claim 11, additionally comprising further instructions for continuing to parse the input file with all remaining component parsers after at least one component parser recognizes the file format of the input file.

[see rejection of claim 1, wherein the virus detection objects are iteratively produced. Thus, there are no remaining detection objects left after one successfully identifies the presence of a virus.]

As per claim 15, Chen teaches:

The processor-readable medium as recited in claim 1, wherein sending a status comprises further instructions for: sending a file-has-no-code status when the file format of the input file was recognized and no executable code was found; and sending a file-has-code status when executable code was found.

[see col. 8, lines 17-24]

As per claim 16, 22, Chen teaches:

The processor-readable medium as recited in claim 1, additionally comprising further instructions for sending a don't-know status when the file format of the input file was not recognized.

[see col. 8, lines 17-24]

As per claim 20, Chen teaches:

The processor-readable medium as recited in claim 1, wherein parsing the input file comprises further instructions for parsing the input file repeatedly with a plurality of component parsers contained within an extensible parser.

[see rejection of claim 1]

As per claim 26, Chen teaches:

The apparatus as recited in claim 21, additionally configured to send the status to: a firewall; a host intrusion detector; or a host vulnerability assessor.

[see fig. 1, element 400]

As per claim 28, Chen teaches:

The processor-readable medium as recited in claim 1, wherein parsing the input file comprises instructions for operating a parser configured to recognize a plurality of file formats.

[see rejection of claim 1]

As per claim 29, Chen teaches:

The apparatus as recited in claim 21, wherein the compound parser is configured to allow extension by addition of a new component parser to the compound parser, wherein the new component parser recognizes a further file format and recognizes executable code within the further file format.

[see col. 7, lines 20-25, Chen teaches a plurality of virus detection objects are produced by the virus detection server and transmitted to the client. These objects are viewed by examiner to be analogous to the claimed "component parsers." Col. 8, lines 1-5 cite that the objects contain information allowing them to detect the type of viruses present at the client based on file type.]

As per claim 30, Chen teaches:

The processor-readable medium as recited in claim 1, wherein adding an additional component parser comprises instructions for:

identifying a new file format, wherein ability to recognize the new file format is functionality to be extended to the compound parser; configuring a new component parser according to the new file format, wherein the new component parser is configured to recognize files of the new format and also to recognize executable code in files of the new format by locating executable code that is inconsistent with the new file format; and extending functionality of the compound parser by adding the new component parser to the compound parser.

[see col. 11, lines 21-50, wherein each iteratively produced virus detection object is tailored to include routines to detect viruses pertaining to a specific file type (ie. .exe or .doc) and wherein each object is produced and added to the already produced list of objects when it is determined that a virus has not yet been detected by the virus detection server.]

As per claim 6-8, 17-19, 23-25, 27:

The processor-readable medium as recited in claim 1, wherein sending the status comprises further instructions for sending the status to an email program/instant messaging program/internet browsing program.

Chen teaches alerting one or more users/administrators but does not specifically mention whether said alert is sent via email, IM, or browser. Depending on the user's capabilities, examiner interprets that it would have been obvious to send said alert via any of the above applications or any other applicable application. Examiner further interprets that this is merely a design choice and a certain user system's functionality.

CONCLUSION

3. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

POINTS OF CONTACT

*. Any response to this Office Action should be **faxed to** (571) 273-8300 **or mailed to:**

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Hand-delivered responses should be brought to

Customer Service Window
Randolph Building
401 Dulany Street
Alexandria, VA 22314

*. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel L. Hoang whose telephone number is 571-270-1019. The examiner can normally be reached on Monday - Thursday, 8:00 a.m. - 5:00 p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nasser Moazzami can be reached on 571-272-4195. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Daniel L. Hoang/
Examiner, Art Unit 2436

/Nasser G Moazzami/
Supervisory Patent Examiner, Art Unit 2436